

10561259

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT	02	CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT	19	BEILSTEIN updated with new compounds
NEWS	4	NOV	15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV	19	WPIX enhanced with XML display format
NEWS	6	NOV	30	ICSD reloaded with enhancements
NEWS	7	DEC	04	LINPADOCDB now available on STN
NEWS	8	DEC	14	BEILSTEIN pricing structure to change
NEWS	9	DEC	17	USPATOLD added to additional database clusters
NEWS	10	DEC	17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC	17	DGENE now includes more than 10 million sequences
NEWS	12	DEC	17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC	17	MEDLINE and LMEALINE updated with 2008 MeSH vocabulary
NEWS	14	DEC	17	CA/CAPLUS enhanced with new custom IPC display formats
NEWS	15	DEC	17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN	02	STN pricing information for 2008 now available
NEWS	17	JAN	16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN	28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN	28	MARPAT searching enhanced
NEWS	20	JAN	28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN	28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN	28	MEDLINE and LMEALINE reloaded with enhancements
NEWS	23	FEB	08	STN Express, Version 8.3, now available
NEWS	24	FEB	20	PCI now available as a replacement to DPCI
NEWS	25	FEB	25	IFIREF reloaded with enhancements
NEWS	26	FEB	25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB	29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	28	MAR	31	IFICDB, IFIPAT, and IFIUIDB enhanced with new custom IPC display formats
NEWS	29	MAR	31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	30	MAR	31	CA/CAPLUS and CASREACT patent number format for U.S. applications updated
NEWS	31	MAR	31	LPCI now available as a replacement to LDPCI

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NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that  
specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 10:05:52 ON 31 MAR 2008

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND  
command can only be used to look at the index in a file which has an  
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of  
commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:06:02 ON 31 MAR 2008

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STRUCTURE FILE UPDATES: 30 MAR 2008 HIGHEST RN 1011030-42-4  
DICTIONARY FILE UPDATES: 30 MAR 2008 HIGHEST RN 1011030-42-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and

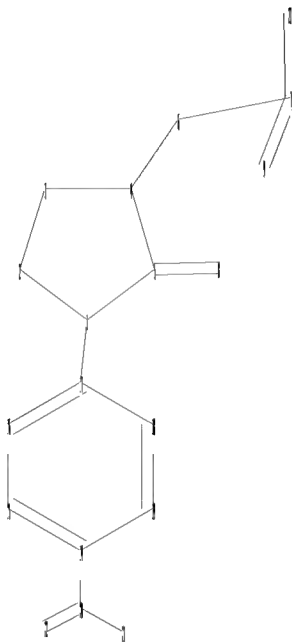
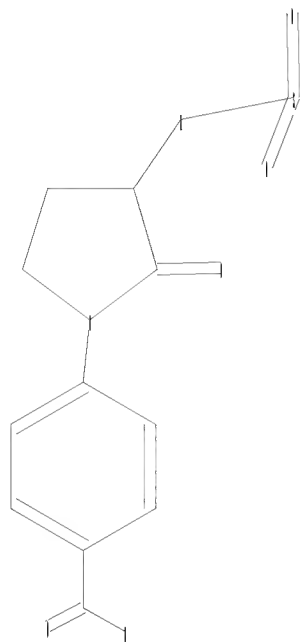
10561259

predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10561259z1.str



chain nodes :  
6 7 8 9 20 21 22 23  
ring nodes :  
1 2 3 4 5 14 15 16 17 18 19  
chain bonds :  
1-17 4-6 5-8 6-7 7-9 7-23 14-20 20-21 20-22  
ring bonds :  
1-2 1-5 2-3 3-4 4-5 14-15 14-19 15-16 16-17 17-18 18-19  
exact/norm bonds :  
1-2 1-5 1-17 4-6 5-8 6-7 7-9 7-23 20-21 20-22  
exact bonds :  
2-3 3-4 4-5 14-20  
normalized bonds :  
14-15 14-19 15-16 16-17 17-18 18-19  
isolated ring systems :  
containing 1 : 14 :

G1: Cy, Hy, Ph

G2: Cy, Hy, Ak

G3: Cy, Hy, Ak, Ph

Match level :

10561259

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 14:Atom  
15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS  
23:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 10:06:18 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED 31 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 286 TO 954

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 10:06:25 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 712 TO ITERATE

100.0% PROCESSED 712 ITERATIONS

57 ANSWERS

SEARCH TIME: 00.00.01

L3 57 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'HCAPLUS' ENTERED AT 10:06:32 ON 31 MAR 2008

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FILE COVERS 1907 - 31 Mar 2008 VOL 148 ISS 14  
FILE LAST UPDATED: 30 Mar 2008 (20080330/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 3 L3

=> s l4 and py<=2003

23980128 PY<=2003

L5 1 L4 AND PY<=2003

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

10.76

189.33

FILE 'REGISTRY' ENTERED AT 10:08:52 ON 31 MAR 2008

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STRUCTURE FILE UPDATES: 30 MAR 2008 HIGHEST RN 1011030-42-4

DICTIONARY FILE UPDATES: 30 MAR 2008 HIGHEST RN 1011030-42-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

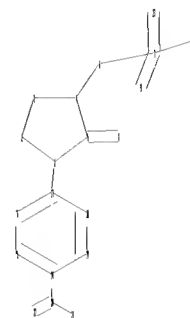
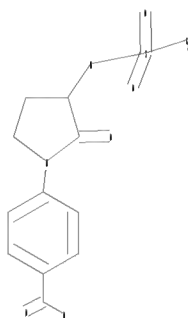
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10561259z2.str

10561259



chain nodes :  
6 7 8 9 20 21 22 23 24  
ring nodes :  
1 2 3 4 5 14 15 16 17 18 19  
chain bonds :  
1-17 4-6 5-8 6-7 7-9 7-23 7-24 14-20 20-21 20-22  
ring bonds :  
1-2 1-5 2-3 3-4 4-5 14-15 14-19 15-16 16-17 17-18 18-19  
exact/norm bonds :  
1-2 1-5 1-17 4-6 5-8 6-7 7-9 7-23 7-24 20-21 20-22  
exact bonds :  
2-3 3-4 4-5 14-20  
normalized bonds :  
14-15 14-19 15-16 16-17 17-18 18-19  
isolated ring systems :  
containing 1 : 14 :

G1: Cy, Hy, Ph

G2: Cy, Hy, Ak

G3: Cy, Hy, Ak, Ph

10561259

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 14:Atom  
15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS  
23:CLASS 24:CLASS

L6 STRUCTURE UPLOADED

=> d l6

L6 HAS NO ANSWERS

L6 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l6

SAMPLE SEARCH INITIATED 10:09:11 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED 31 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 286 TO 954

PROJECTED ANSWERS: 1 TO 80

L7 1 SEA SSS SAM L6

=> s l6 sss full

FULL SEARCH INITIATED 10:09:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 712 TO ITERATE

100.0% PROCESSED 712 ITERATIONS

57 ANSWERS

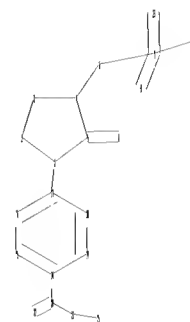
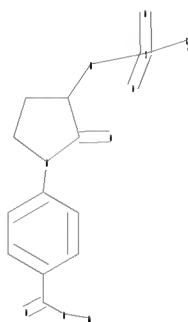
SEARCH TIME: 00.00.01

L8 57 SEA SSS FUL L6

=>

Uploading C:\Program Files\Stnexp\Queries\10561259z3.str

10561259



chain nodes :  
6 7 8 9 20 21 22 23 24 25  
ring nodes :  
1 2 3 4 5 14 15 16 17 18 19  
chain bonds :  
1-17 4-6 5-8 6-7 7-9 7-23 7-24 14-20 20-21 20-22 21-25  
ring bonds :  
1-2 1-5 2-3 3-4 4-5 14-15 14-19 15-16 16-17 17-18 18-19  
exact/norm bonds :  
1-2 1-5 1-17 4-6 5-8 6-7 7-9 7-23 7-24 20-21 20-22 21-25  
exact bonds :  
2-3 3-4 4-5 14-20  
normalized bonds :  
14-15 14-19 15-16 16-17 17-18 18-19  
isolated ring systems :  
containing 1 : 14 :

G1: Cy, Hy, Ph

G2: Cy, Hy, Ak

G3: Cy, Hy, Ak, Ph



10561259

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 14:Atom  
15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS  
23:CLASS 24:CLASS 25:CLASS

L9 STRUCTURE UPLOADED

=> d 19

L9 HAS NO ANSWERS

L9 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 19

SAMPLE SEARCH INITIATED 10:10:53 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 31 TO ITERATE

100.0% PROCESSED 31 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 286 TO 954

PROJECTED ANSWERS: 1 TO 80

L10 1 SEA SSS SAM L9

=> s 19 sss full

FULL SEARCH INITIATED 10:10:58 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 712 TO ITERATE

100.0% PROCESSED 712 ITERATIONS

55 ANSWERS

SEARCH TIME: 00.00.01

L11 55 SEA SSS FUL L9

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

357.64

546.97

FILE 'HCAPLUS' ENTERED AT 10:11:03 ON 31 MAR 2008

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FILE COVERS 1907 - 31 Mar 2008 VOL 148 ISS 14  
FILE LAST UPDATED: 30 Mar 2008 (20080330/ED)

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This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> d his

(FILE 'HOME' ENTERED AT 10:05:52 ON 31 MAR 2008)

FILE 'REGISTRY' ENTERED AT 10:06:02 ON 31 MAR 2008

L1 STRUCTURE UPLOADED  
L2 1 S L1  
L3 57 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 10:06:32 ON 31 MAR 2008

L4 3 S L3  
L5 1 S L4 AND PY<=2003

FILE 'REGISTRY' ENTERED AT 10:08:52 ON 31 MAR 2008

L6 STRUCTURE UPLOADED  
L7 1 S L6  
L8 57 S L6 SSS FULL  
L9 STRUCTURE UPLOADED  
L10 1 S L9  
L11 55 S L9 SSS FULL

FILE 'HCAPLUS' ENTERED AT 10:11:03 ON 31 MAR 2008

=> s 18

L12 3 L8

=> s 111

L13 3 L11

=> d 14 ibib abs hitstr tot

L4 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124629 HCAPLUS

DOCUMENT NUMBER: 142:74440

TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-one  
derivatives as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
Anderson; Kleanthous, Savvas; Mason, Andrew Mcmurtrie;  
Watson, Nigel Stephen

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

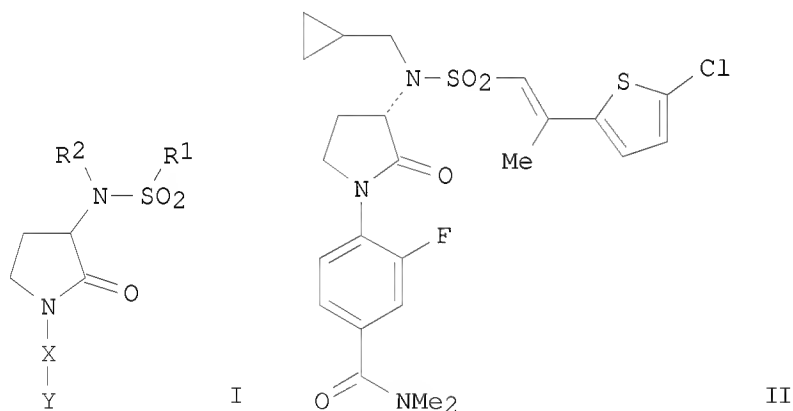
SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

10561259

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110435	A1	20041223	WO 2004-EP6592	20040617
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1635817	A1	20060322	EP 2004-736979	20040617
EP 1635817	B1	20061122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2006527729	T	20061207	JP 2006-515988	20040617
AT 345795	T	20061215	AT 2004-736979	20040617
ES 2276307	T3	20070616	ES 2004-736979	20040617
US 20060148879	A1	20060706	US 2005-561545	20051219
US 7329685	B2	20080212		
PRIORITY APPLN. INFO.:			GB 2003-14299	A 20030619
			WO 2004-EP6592	W 20040617
OTHER SOURCE(S):		MARPAT 142:74440		
GI				



AB Title compds. represented by the formula I [wherein R1 = (un)substituted naphthyl, 2-benzofuryl, phenyl(alkyl), etc.; R2 = alkyl(cycloalkyl), alkylamino, alkoxyalkyl, etc.; with the proviso that R2 does not present alkylmorpholino; X = (un)substituted Ph or aromatic heterocyclic group; Y = H, halo, alkyl, amino, etc.; and pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of factor Xa. For example, II was

given in a multi-step synthesis starting from the reaction of 2-fluoro-4-iodoaniline with tert-Bu ((3S)-2-oxotetrahydro-3-furanyl)carbamate. The prepared compds. showed activity in vitro assay for inhibition of factor Xa with  $K_i$  values less than 0.1  $\mu\text{M}$ , and in measurement of prothrombin time (PT) of human plasma. Thus, I and their pharmaceutical compns. are useful medicine, particularly in the amelioration of a clin. condition for which a factor Xa inhibitor is indicated (no data).

IT 811788-71-3P 811788-72-4P 811788-73-5P  
811788-74-6P 811788-75-7P 811788-76-8P  
811788-77-9P 811788-78-0P 811788-79-1P  
811788-80-4P 811788-81-5P 811788-82-6P  
811788-83-7P 811788-84-8P

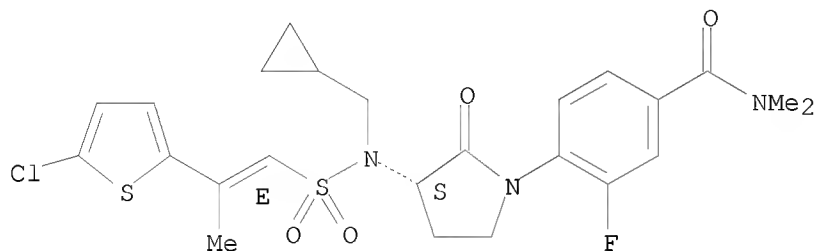
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-(sulfonylamino)pyrrolidine-2-one derivs. as factor Xa inhibitors)

RN 811788-71-3 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl](cyclopropylmethyl)amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

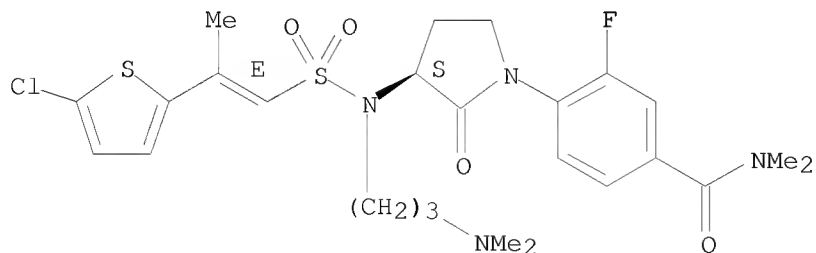
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811788-72-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl][3-(dimethylamino)propyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

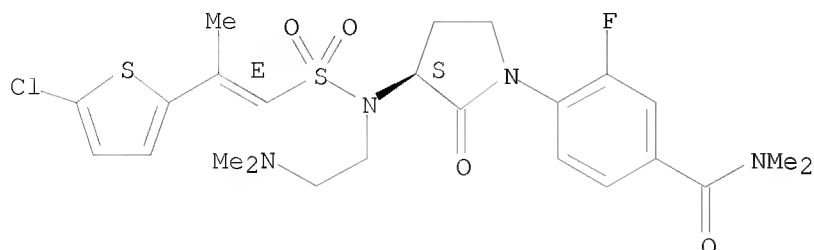


RN 811788-73-5 HCAPLUS

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CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl][2-(dimethylamino)ethyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

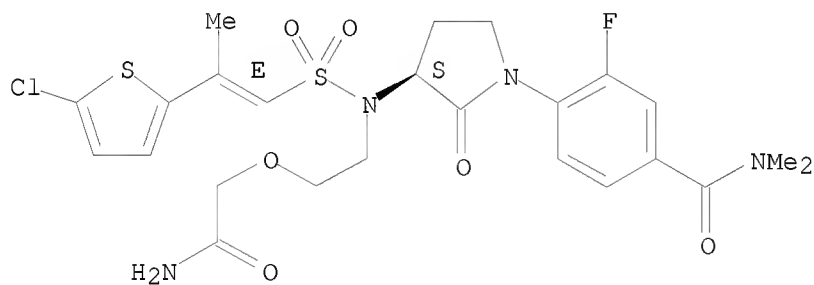
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811788-74-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[2-(2-amino-2-oxoethoxy)ethyl][[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

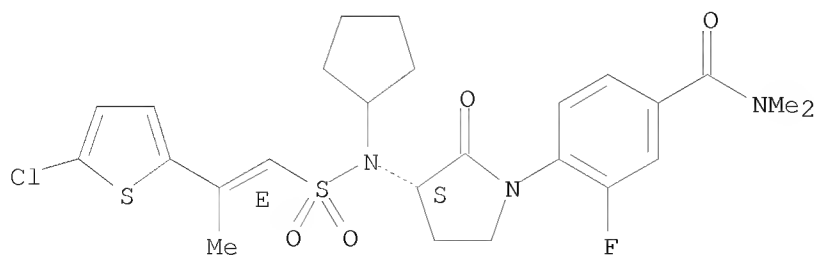
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811788-75-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]cyclopentylamino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

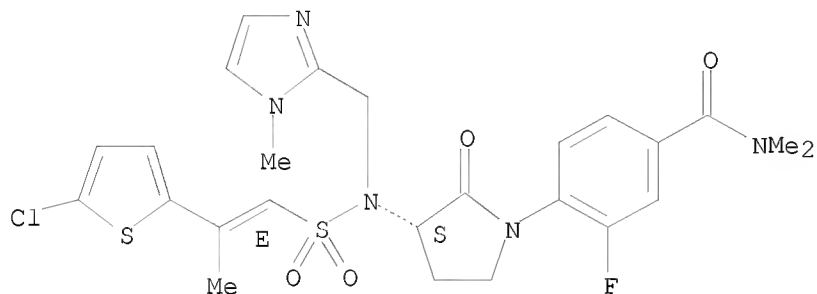


10561259

RN 811788-76-8 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl][(1-methyl-1H-imidazol-2-yl)methyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

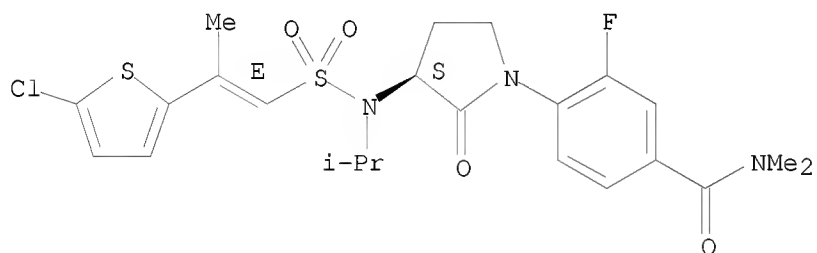
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811788-77-9 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl](1-methylethyl)amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

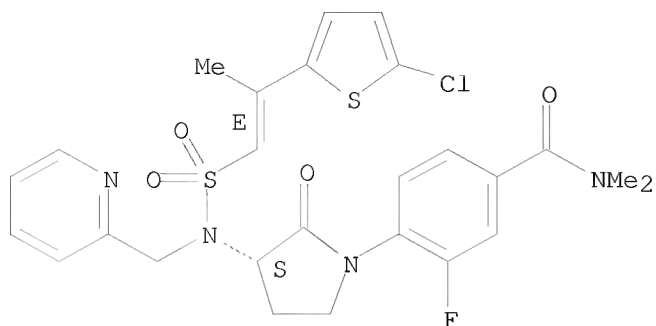


RN 811788-78-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl](2-pyridinylmethyl)amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

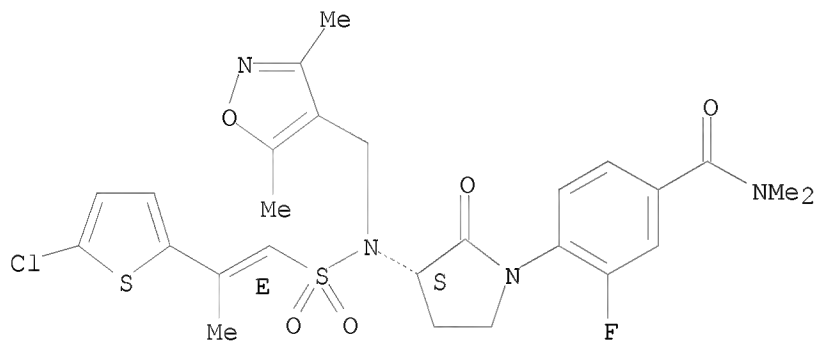
10561259



RN 811788-79-1 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl][(3,5-dimethyl-4-isoxazolyl)methyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

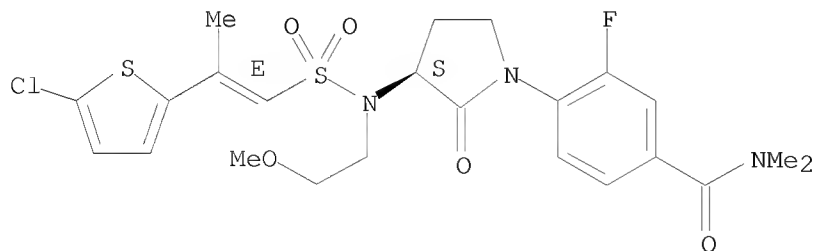
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811788-80-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl](2-methoxyethyl)amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

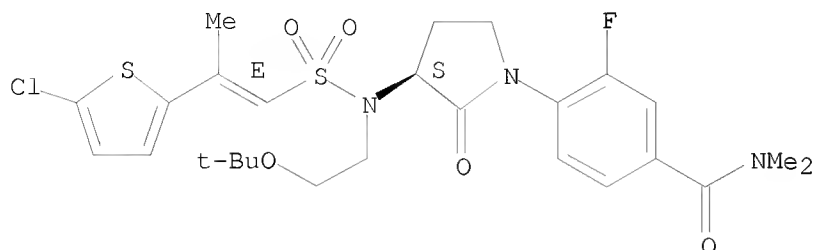


RN 811788-81-5 HCAPLUS

10561259

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl][2-(1,1-dimethylethoxy)ethyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

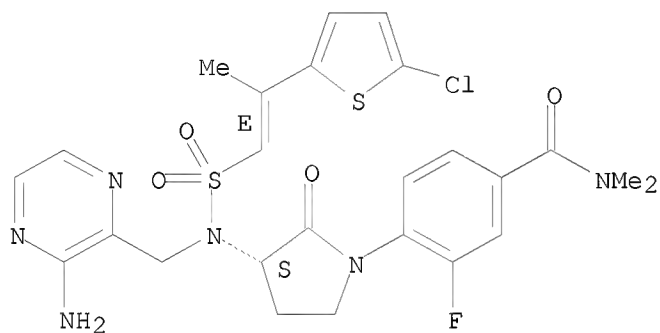
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811788-82-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(3-aminopyrazinyl)methyl][[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



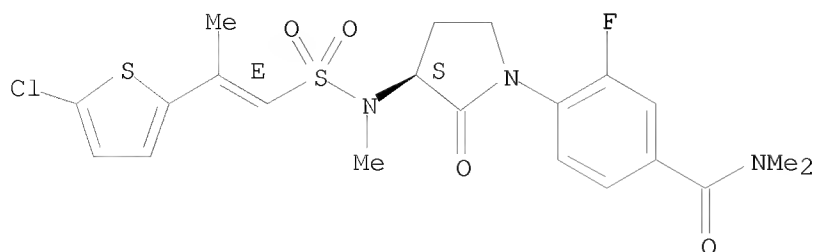
RN 811788-83-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]methylamino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



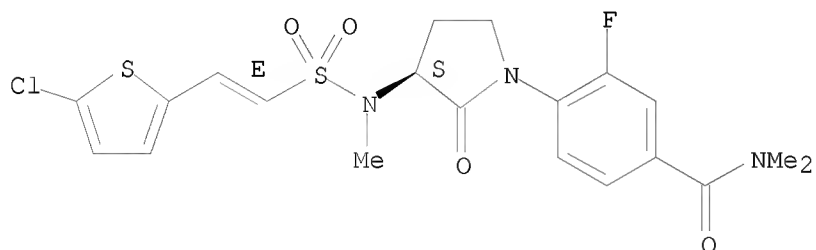
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RN 811788-84-8 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]methylamino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



IT 553651-62-0P 553651-68-6P

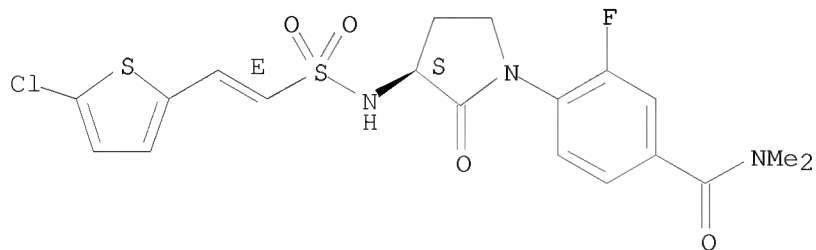
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 3-(sulfonylamino)pyrrolidine-2-one derivs. as factor Xa inhibitors)

RN 553651-62-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

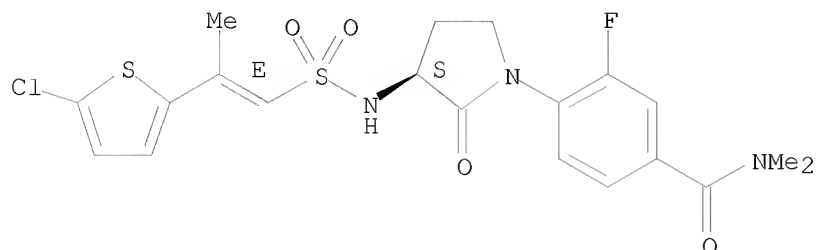


RN 553651-68-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

10561259

Absolute stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124628 HCAPLUS

DOCUMENT NUMBER: 142:74439

TITLE: Preparation of 3-(sulfonylamino)pyrrolidine-2-one derivatives as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Kleanthous, Savvas; Senger, Stefan; Smith, Ian Edward David

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

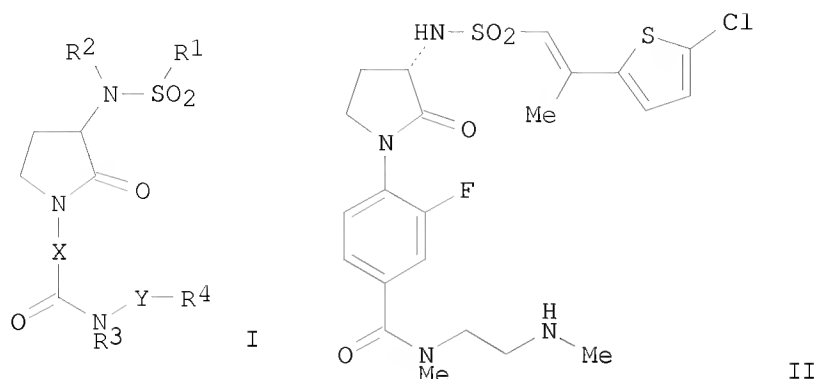
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110434	A1	20041223	WO 2004-EP6591	20040617
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1633347	A1	20060315	EP 2004-740039	20040617
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR			
JP 2006527728	T	20061207	JP 2006-515987	20040617
US 20070203206	A1	20070830	US 2006-561259	20060428
PRIORITY APPLN. INFO.:			GB 2003-14370	A 20030619
			WO 2004-EP6591	W 20040617
OTHER SOURCE(S):	MARPAT 142:74439			
GI				



AB Title compds. represented by the formula I [wherein R1 = (un)substituted naphthyl, 2-benzofuryl, thienylalkyl, phenyl(alkyl), etc.; R2 = H, alkyl, alkylamido, carbonylalkoxy, etc.; X = (un)substituted Ph or aromatic heterocyclic group; Y = absent or alkylene; and pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of factor Xa. For example, II was given in a multi-step synthesis starting from the reaction of 2-fluoro-4-iodoaniline with tert-Bu ((3S)-2-oxotetrahydro-3-furanyl)carbamate. Most of the prepared compds. showed activity in vitro assay for inhibition of factor Xa with Ki values of less than 1  $\mu$ M. Thus, I and their pharmaceutical compns. are useful medicine, particularly in the amelioration of a clin. condition for which a factor Xa inhibitor is indicated (no data).

IT 811793-44-9P 811793-49-4P 811793-53-0P  
 811793-56-3P 811793-61-0P 811793-62-1P  
 811793-65-4P 811793-69-8P 811793-71-2P  
 811793-74-5P 811793-76-7P 811793-79-0P  
 811793-82-5P 811793-83-6P 811793-84-7P  
 811793-86-9P 811793-87-0P 811793-90-5P  
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 811794-02-2P 811794-03-3P 811794-04-4P  
 811794-05-5P 811794-07-7P 811794-09-9P  
 811794-11-3P 811794-12-4P 811794-14-6P  
 811794-16-8P 811794-18-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

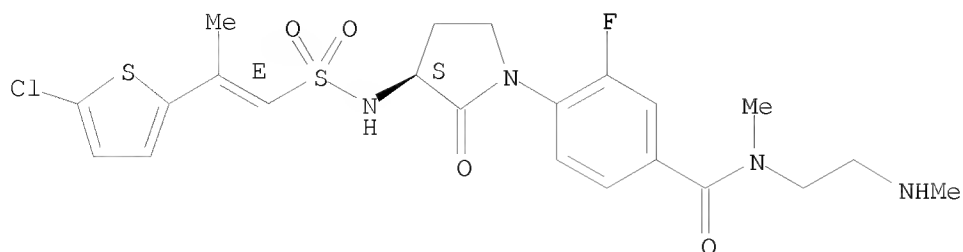
(preparation of 1-phenyl-3-(sulfonylamino)pyrrolidine-2-one derivs. as factor Xa inhibitors)

RN 811793-44-9 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(methylamino)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

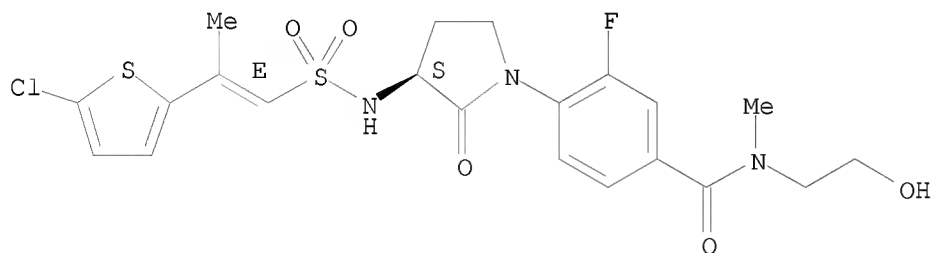
10561259



RN 811793-49-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(2-hydroxyethyl)-N-methyl- (9CI) (CA INDEX NAME)

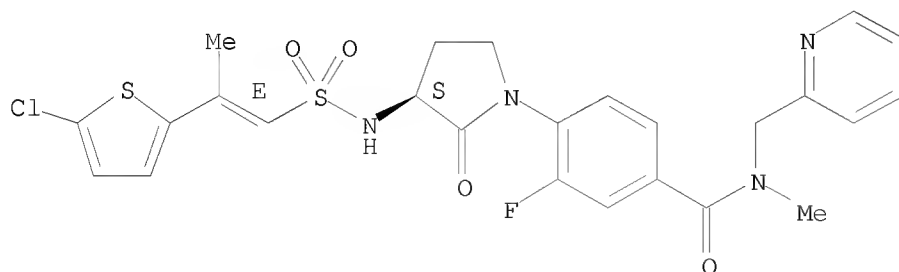
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811793-53-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



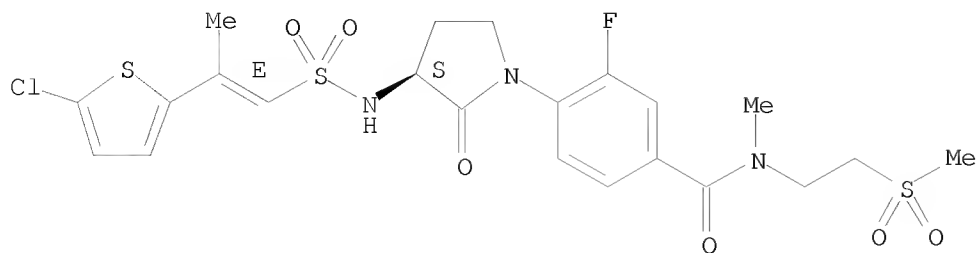
RN 811793-56-3 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(methylsulfonyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10561259

Double bond geometry as shown.

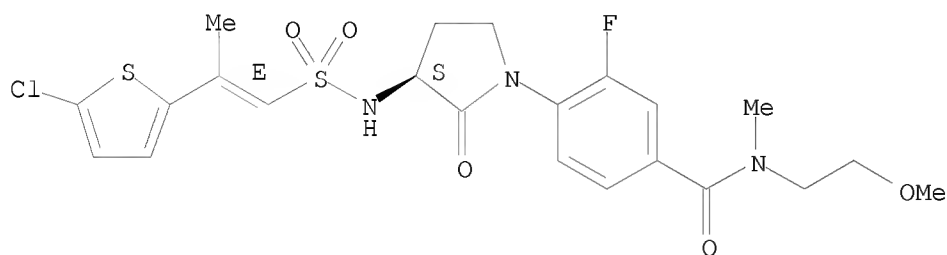


RN 811793-61-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(2-methoxyethyl)-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

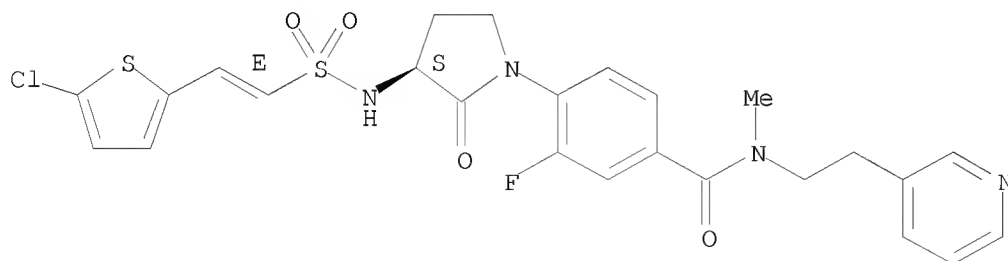


RN 811793-62-1 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(3-pyridinyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



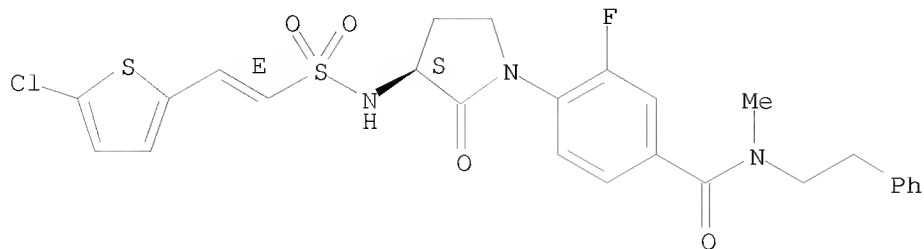
RN 811793-65-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-(2-phenylethyl)- (CA INDEX NAME)

Absolute stereochemistry.

10561259

Double bond geometry as shown.

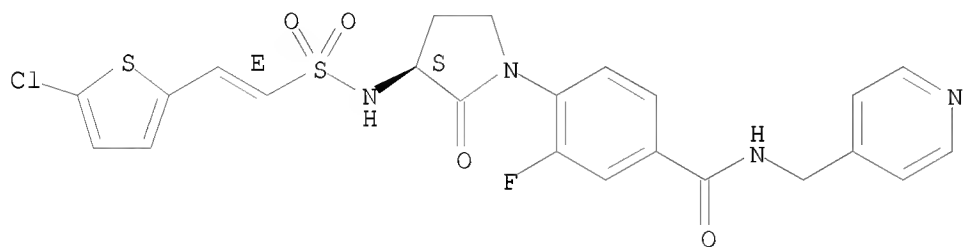


RN 811793-69-8 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

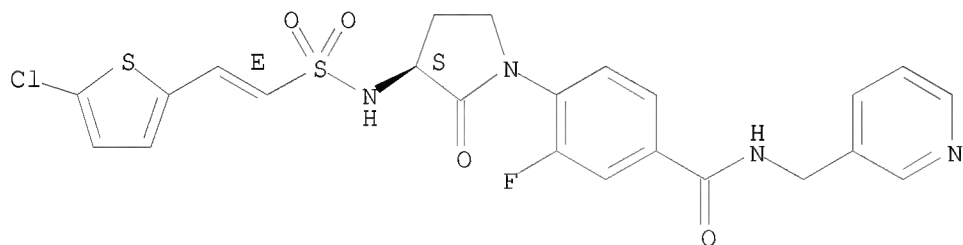


RN 811793-71-2 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(3-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



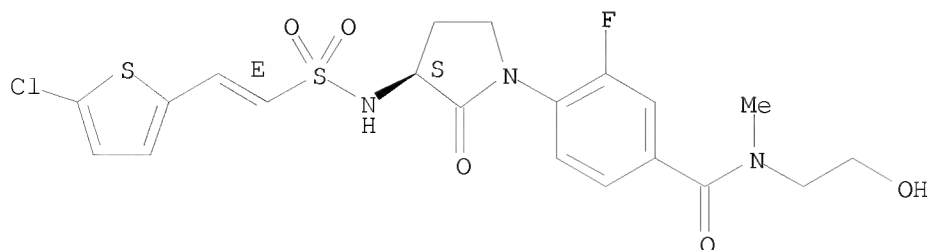
RN 811793-74-5 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(2-hydroxyethyl)-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

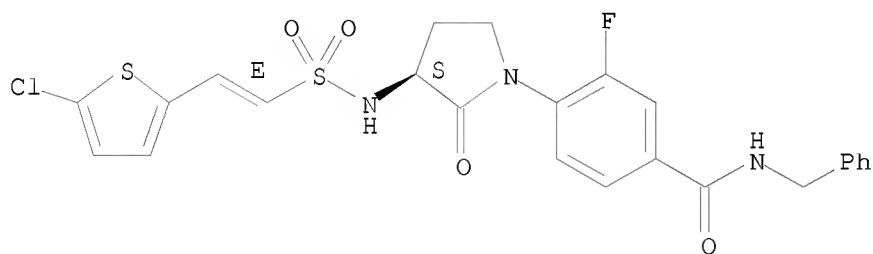
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RN 811793-76-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(phenylmethyl)- (CA INDEX NAME)

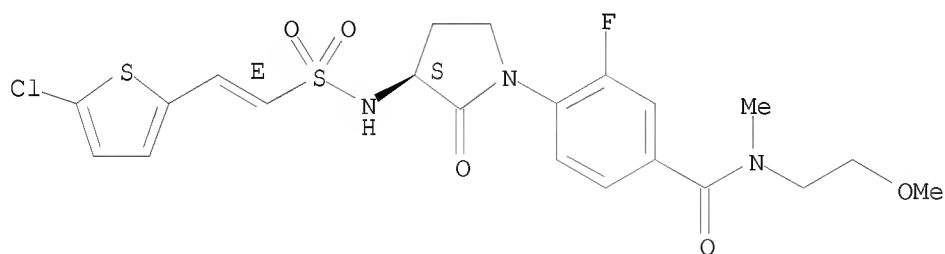
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811793-79-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(2-methoxyethyl)-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

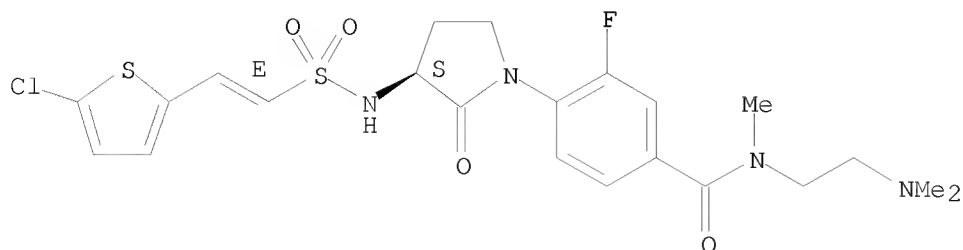


RN 811793-82-5 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-N-[2-(dimethylamino)ethyl]-3-fluoro-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

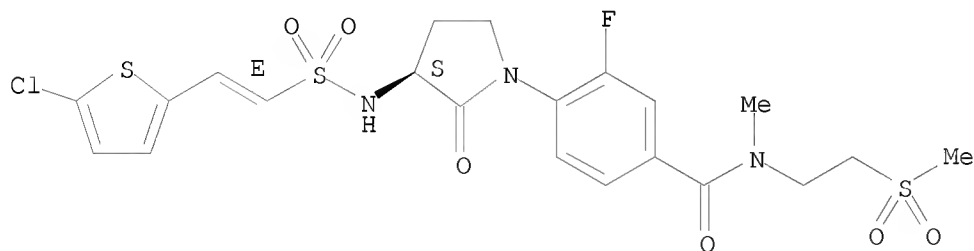
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RN 811793-83-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(methylsulfonyl)ethyl]- (CA INDEX NAME)

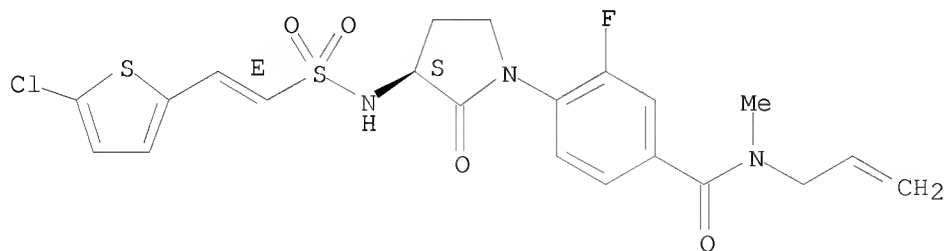
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811793-84-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



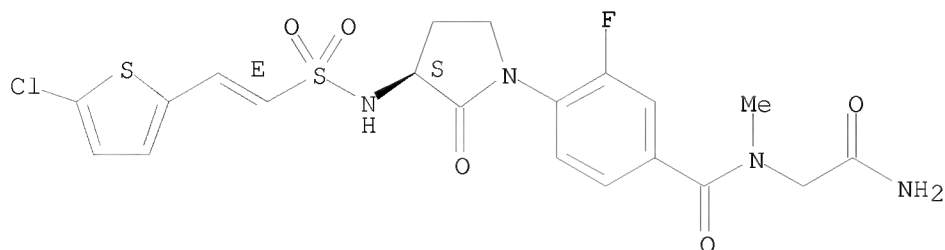
RN 811793-86-9 HCAPLUS

CN Benzamide, N-(2-amino-2-oxoethyl)-4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



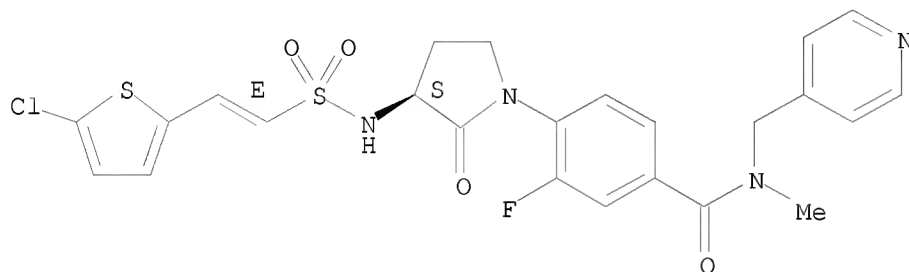
10561259



RN 811793-87-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

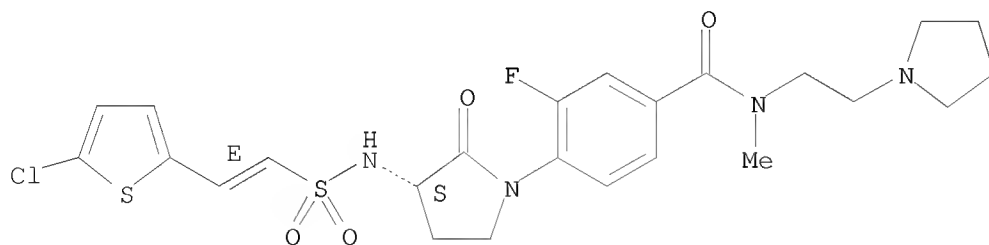
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811793-90-5 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(1-pyrrolidinyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



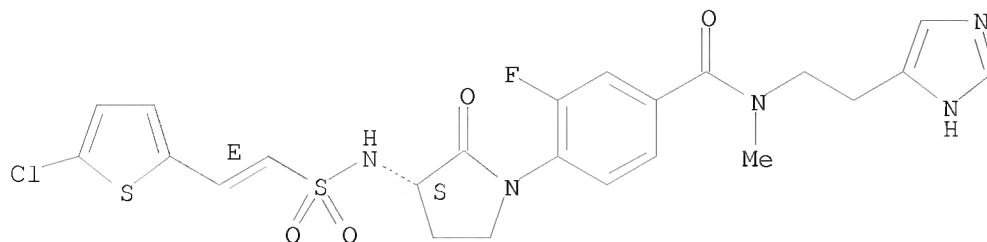
RN 811793-92-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-[2-(1H-imidazol-4-yl)ethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10561259

Double bond geometry as shown.

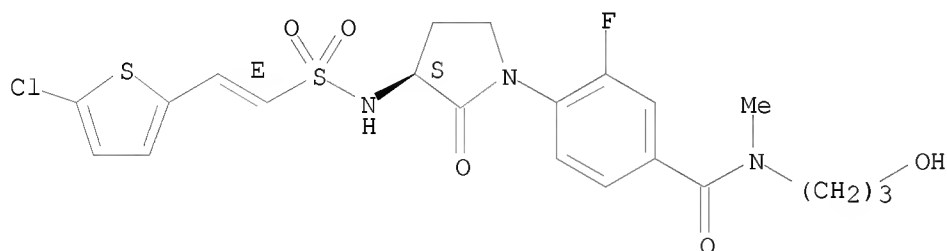


RN 811793-94-9 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-(3-hydroxypropyl)-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

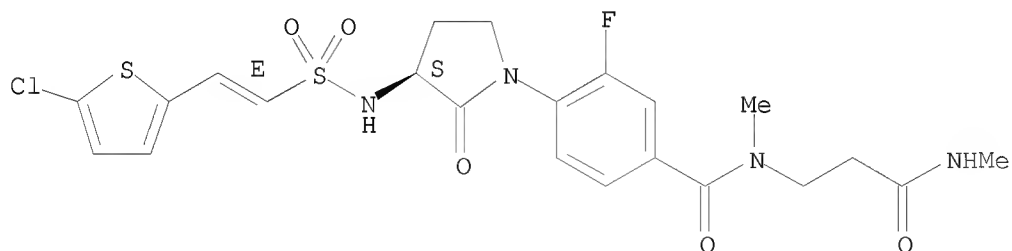


RN 811793-96-1 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[3-(methylamino)-3-oxopropyl]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



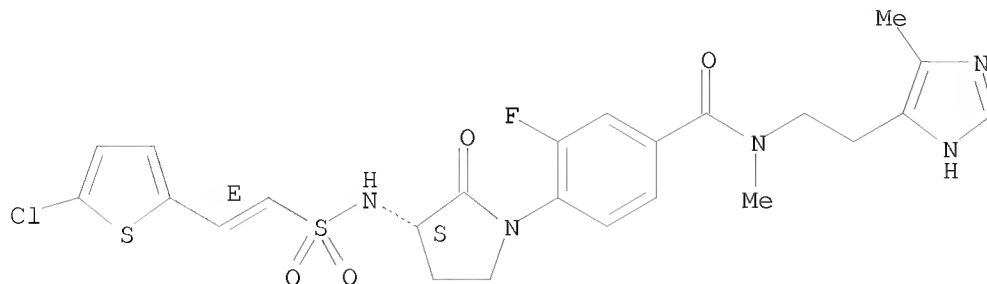
RN 811793-98-3 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(5-methyl-1H-imidazol-4-yl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10561259

Double bond geometry as shown.

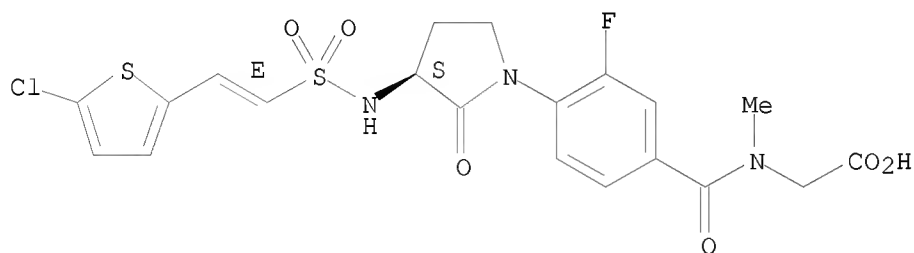


RN 811793-99-4 HCAPLUS

CN Glycine, N-[4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluorobenzoyl]-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

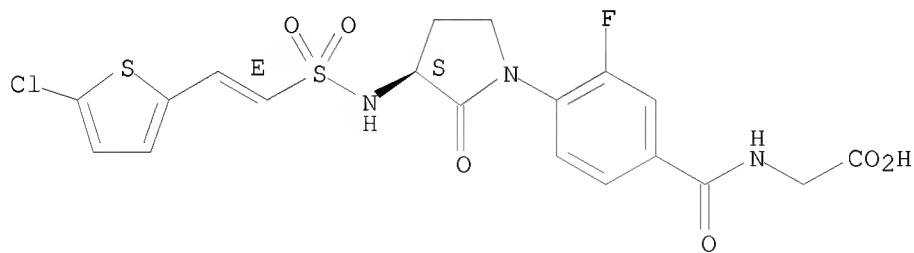


RN 811794-01-1 HCAPLUS

CN Glycine, N-[4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluorobenzoyl]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

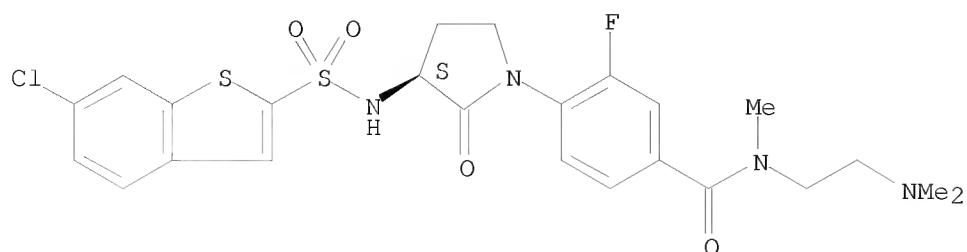


RN 811794-02-2 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-N-[2-(dimethylamino)ethyl]-3-fluoro-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

10561259



RN 811794-03-3 HCAPLUS

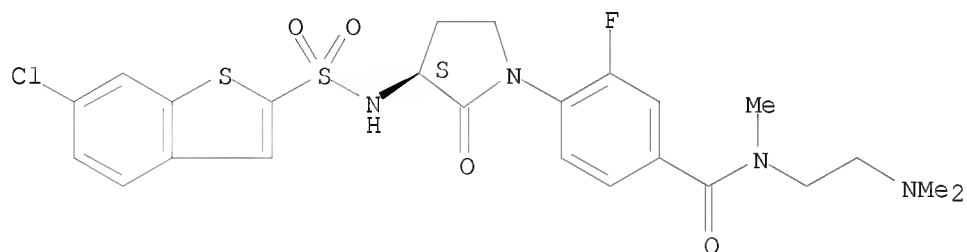
CN Formic acid, compd. with 4-[(3S)-3-[[[6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-N-[2-(dimethylamino)ethyl]-3-fluoro-N-methylbenzamide (1:1) (CA INDEX NAME)

CM 1

CRN 811794-02-2

CMF C24 H26 Cl F N4 O4 S2

Absolute stereochemistry.



CM 2

CRN 64-18-6

CMF C H2 O2

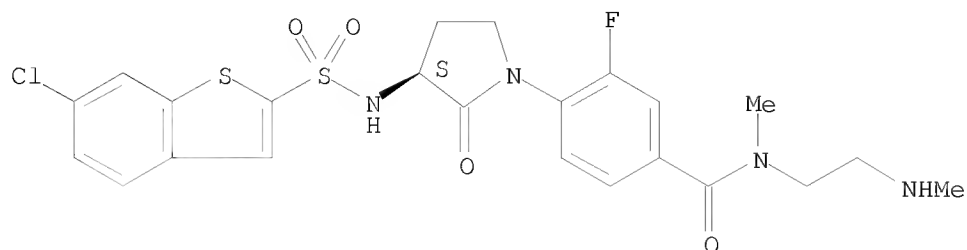
O=CH-OH

RN 811794-04-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-N-methyl-N-[2-(methylamino)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

10561259



RN 811794-05-5 HCAPLUS

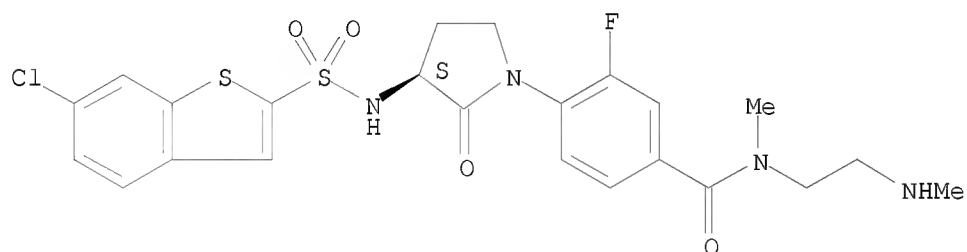
CN Formic acid, compd. with 4-[(3S)-3-[[6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(methylamino)ethyl]benzamide (1:1) (CA INDEX NAME)

CM 1

CRN 811794-04-4

CMF C23 H24 Cl F N4 O4 S2

Absolute stereochemistry.



CM 2

CRN 64-18-6

CMF C H2 O2

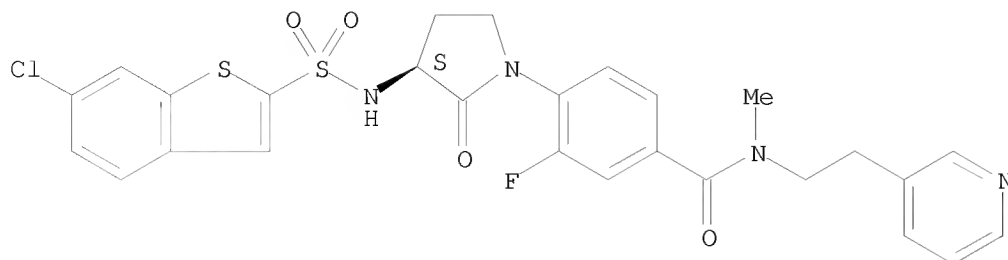
O=CH-OH

RN 811794-07-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(3-pyridinyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

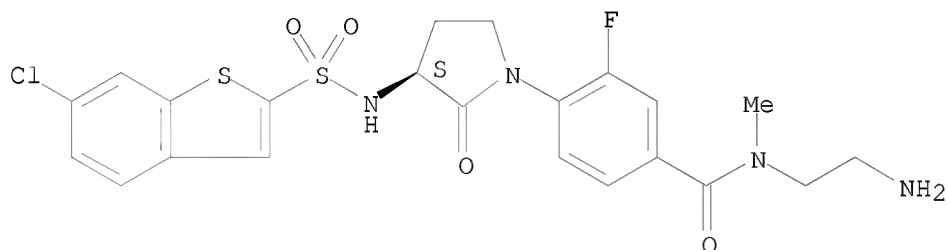
10561259



RN 811794-09-9 HCAPLUS

CN Benzamide, N-(2-aminoethyl)-4-[(3S)-3-[[[6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl- (CA INDEX NAME)

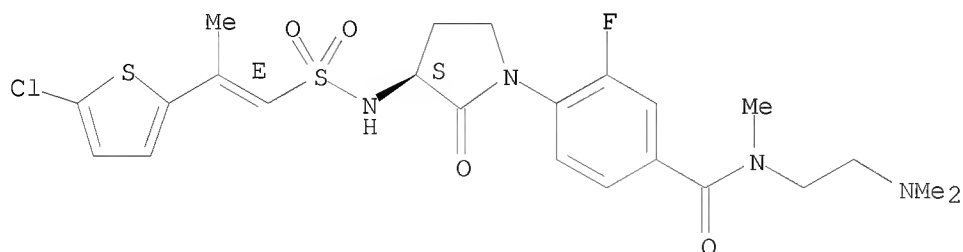
Absolute stereochemistry.



RN 811794-11-3 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-N-[2-(dimethylamino)ethyl]-3-fluoro-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 811794-12-4 HCAPLUS

CN Formic acid, compd. with 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-N-[2-(dimethylamino)ethyl]-3-fluoro-N-methylbenzamide (1:1) (9CI) (CA INDEX NAME)

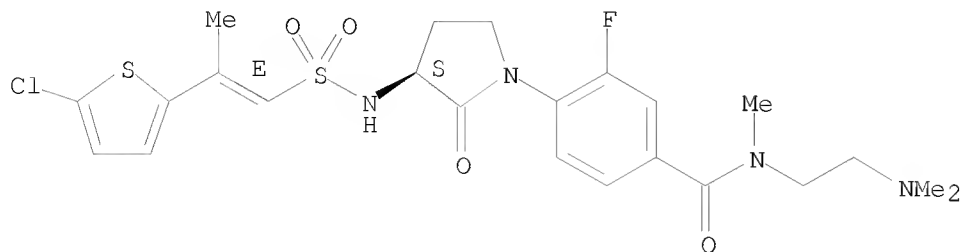
CM 1

CRN 811794-11-3

10561259

CMF C23 H28 Cl F N4 O4 S2

Absolute stereochemistry.  
Double bond geometry as shown.



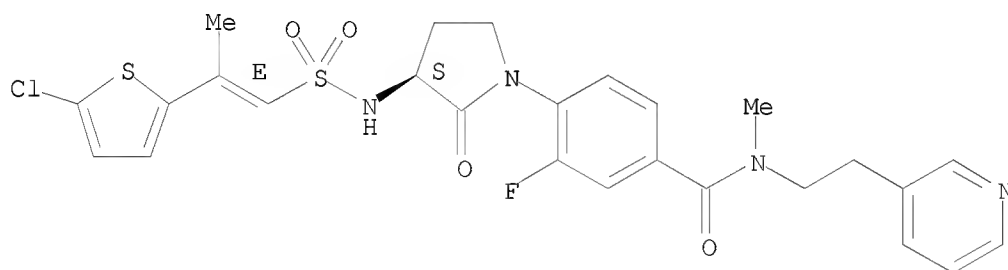
CM 2

CRN 64-18-6  
CMF C H2 O2

O=CH-OH

RN 811794-14-6 HCAPLUS  
CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(3-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

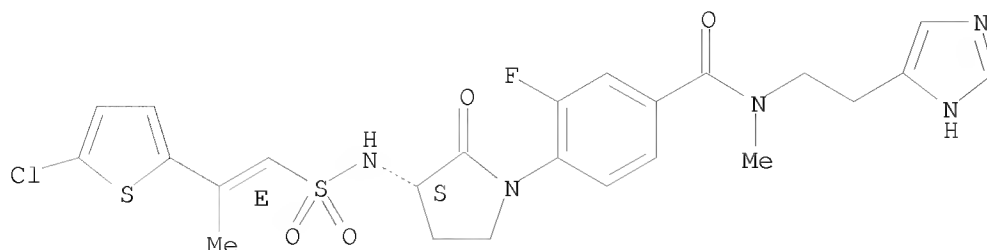
Absolute stereochemistry.  
Double bond geometry as shown.



RN 811794-16-8 HCAPLUS  
CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-[2-(1H-imidazol-4-yl)ethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

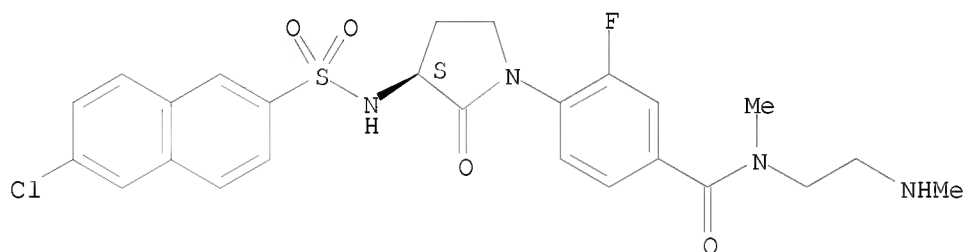
10561259



RN 811794-18-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[6-chloro-2-naphthalenyl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-[2-(methylamino)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:511293 HCAPLUS

DOCUMENT NUMBER: 139:85238

TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-ones as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
Anderson; King, Nigel Paul; Kleanthous, Savvas; Mason, Andrew  
McMurtrie; Pinto, Ivan Leo; Pollard, Derek Roland; Senger, Stefan; Shah, Gita Punjabhai; Watson, Nigel Stephen; Young, Robert John

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

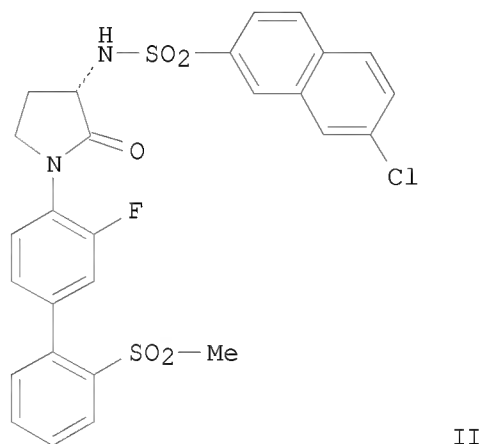
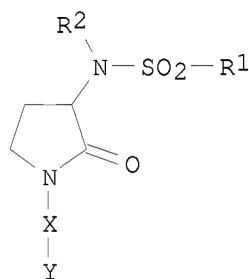
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				



PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

TW 262075	B	20060921	TW 2002-91136597	20021219
CA 2471461	A1	20030703	CA 2002-2471461	20021220
AU 2002366747	A1	20030709	AU 2002-366747	20021220
EP 1456172	A1	20040915	EP 2002-805350	20021220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002015200	A	20041013	BR 2002-15200	20021220
CN 1620434	A	20050525	CN 2002-828224	20021220
JP 2005519885	T	20050707	JP 2003-554642	20021220
HU 2005000137	A2	20060228	HU 2005-137	20021220
NZ 533129	A	20061222	NZ 2002-533129	20021220
RU 2318807	C2	20080310	RU 2004-122427	20021220
ZA 2004004147	A	20050621	ZA 2004-4147	20040527
IN 2004DN01467	A	20070209	IN 2004-DN1467	20040528
MX 2004PA06139	A	20041101	MX 2004-PA6139	20040621
NO 2004002990	A	20040920	NO 2004-2990	20040713
US 20050059726	A1	20050317	US 2004-499529	20041101
PRIORITY APPLN. INFO.:			GB 2001-30705	A 20011221
OTHER SOURCE(S):			WO 2002-EP14826	W 20021220
GI				
MARPAT 139:85238				



AB Title compds. I [wherein R1 = (un)substituted naphthyl, benzothienyl, benzofuryl, indolyl, phenyl(alkyl), 2,2'-bithiophen-5-yl, thienyl(alkyl), or thieno[3,2-b]thiophenyl; R2 = H, (CH2)<sub>n</sub>CONRaRb, (CH2)<sub>n</sub>CO2Rc, morpholinoalkyl, CO2Rc, or carboxyalkyl; X = H, halo, CN, alkyl, alkenyl, CF3, NRaRb, NO2, NRcCHO, NHCORc, NHSO2Rc, alkoxyalkyl, hydroxyalkyl, CORc, CONRaRb, SOO-2Rc, SO2NRaRb, or (un)substituted Ph, heterocyclyl, or heteroaryl; n = 1-3; Ra and Rb = independently H or alkyl; or NRaRb = (un)substituted heterocyclyl; Rc = alkyl; and pharmaceutically acceptable derivs. thereof] were prepared as factor Xa inhibitors. For example,

coupling of (3S)-3-amino-1-[3-fluoro-2'-(methylsulfonyl)-1,1'-biphenyl-4-yl]pyrrolidin-2-one with 6-chloro-2-naphthylsulfonyl chloride in the presence of pyridine in DCM gave II. The latter inhibited human factor Xa in an in vitro fluorogenic assay with  $K_i < 10$  nM. Thus, I and compns. comprising I are useful as medicines for the amelioration of clin. conditions for which a Factor Xa inhibitor is indicated (no data).

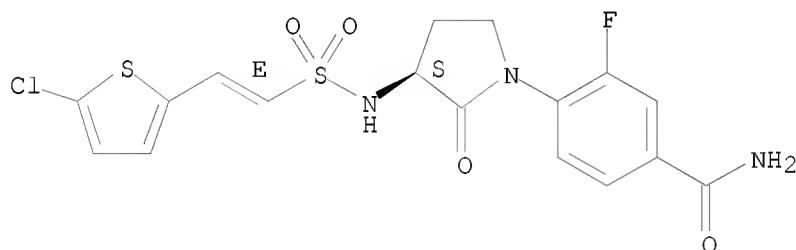
IT 553651-65-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(factor Xa inhibitor; preparation of (sulfonylamino)pyrrolidinone factor Xa inhibitors starting from homoserines)

RN 553651-65-3 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



IT 553651-62-0P 553651-66-4P 553651-67-5P,  
(S)-4-[3-[[[(6-Chlorobenzothien-2-yl)sulfonyl]amino]-2-oxopyrrolidin-1-yl]-3-fluoro-N,N-dimethylbenzamide 553651-68-6P 553651-69-7P  
, (S)-4-[3-[[[(6-Chlorobenzothien-2-yl)sulfonyl]amino]-2-oxopyrrolidin-1-yl]-3-fluoro-N-isopropyl-N-methylbenzamide 553651-92-6P  
553651-93-7P

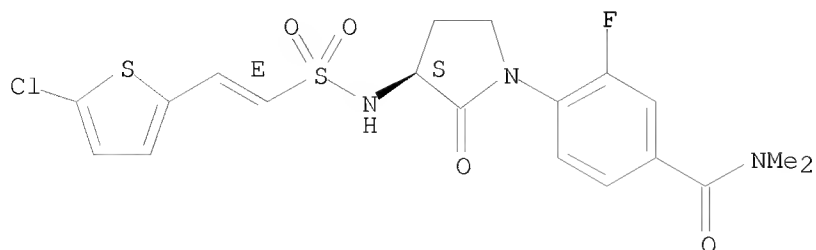
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(factor Xa inhibitor; preparation of (sulfonylamino)pyrrolidinone factor Xa inhibitors starting from homoserines)

RN 553651-62-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

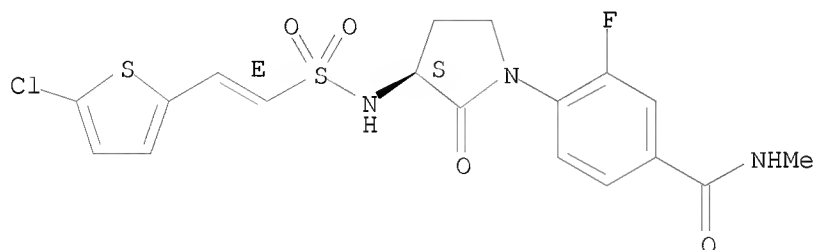
10561259



RN 553651-66-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl- (CA INDEX NAME)

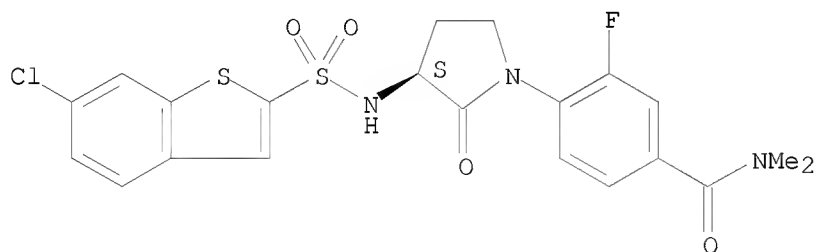
Absolute stereochemistry.  
Double bond geometry as shown.



RN 553651-67-5 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

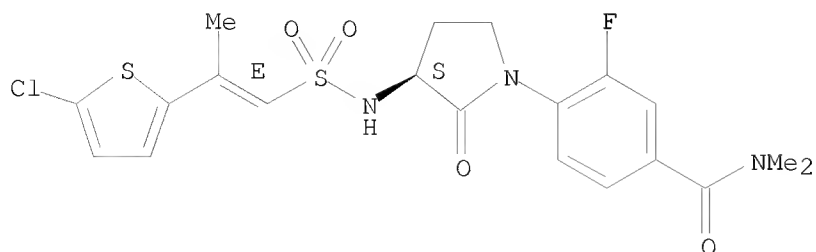


RN 553651-68-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

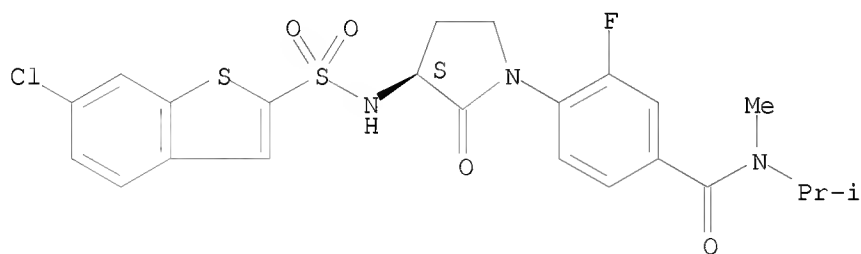
10561259



RN 553651-69-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[(6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-(1-methylethyl)- (CA INDEX NAME)

Absolute stereochemistry.

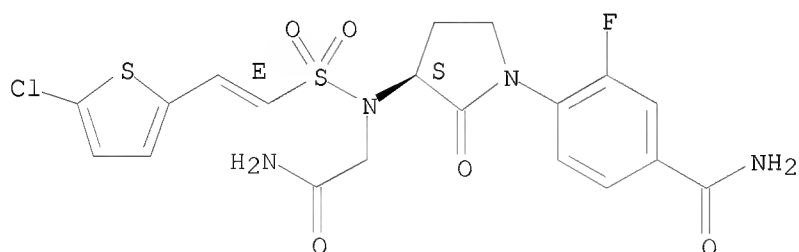


RN 553651-92-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[(2-amino-2-oxoethyl)[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



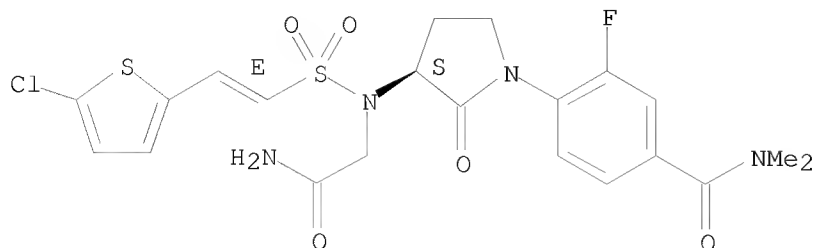
RN 553651-93-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[(2-amino-2-oxoethyl)[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

10561259



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 15 ibib abs hitstr tot

L5 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:511293 HCAPLUS

DOCUMENT NUMBER: 139:85238

TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-ones as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
Anderson; King, Nigel Paul; Kleanthous, Savvas; Mason,  
Andrew McMurtrie; Pinto, Ivan Leo; Pollard, Derek  
Roland; Senger, Stefan; Shah, Gita Punjabhai; Watson,  
Nigel Stephen; Young, Robert John

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

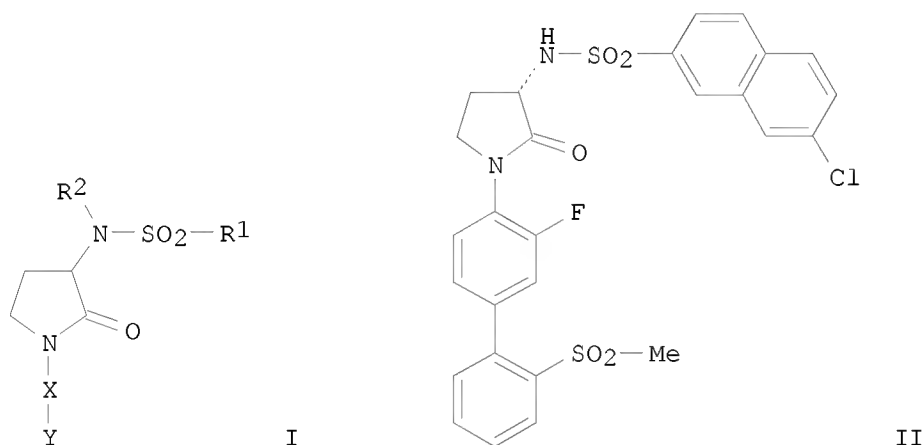
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
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CA 2471461	A1	20030703	CA 2002-2471461	20021220 <--
AU 2002366747	A1	20030709	AU 2002-366747	20021220 <--
EP 1456172	A1	20040915	EP 2002-805350	20021220
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BR 2002015200	A	20041013	BR 2002-15200	20021220
CN 1620434	A	20050525	CN 2002-828224	20021220

JP 2005519885	T	20050707	JP 2003-554642	20021220
HU 2005000137	A2	20060228	HU 2005-137	20021220
NZ 533129	A	20061222	NZ 2002-533129	20021220
RU 2318807	C2	20080310	RU 2004-122427	20021220
ZA 2004004147	A	20050621	ZA 2004-4147	20040527
IN 2004DN01467	A	20070209	IN 2004-DN1467	20040528
MX 2004PA06139	A	20041101	MX 2004-PA6139	20040621
NO 2004002990	A	20040920	NO 2004-2990	20040713
US 20050059726	A1	20050317	US 2004-499529	20041101
PRIORITY APPLN. INFO.:			GB 2001-30705	A 20011221
			WO 2002-EP14826	W 20021220
OTHER SOURCE(S):	MARPAT 139:85238			
GI				



AB Title compds. I [wherein R1 = (un)substituted naphthyl, benzothienyl, benzofuryl, indolyl, phenyl(alkyl), 2,2'-bithiophen-5-yl, thienyl(alkyl), or thieno[3,2-b]thiophenyl; R2 = H, (CH2)<sub>n</sub>CONRaRb, (CH2)<sub>n</sub>CO2Rc, morpholinoalkyl, CO2Rc, or carboxyalkyl; X = H, halo, CN, alkyl, alkenyl, CF3, NRaRb, NO2, NRcCHO, NHCORc, NHSO2Rc, alkoxyalkyl, hydroxyalkyl, CORc, CONRaRb, SOO-2Rc, SO2NRaRb, or (un)substituted Ph, heterocyclyl, or heteroaryl; n = 1-3; Ra and Rb = independently H or alkyl; or NRaRb = (un)substituted heterocyclyl; Rc = alkyl; and pharmaceutically acceptable derivs. thereof] were prepared as factor Xa inhibitors. For example, coupling of (3S)-3-amino-1-[3-fluoro-2'-(methylsulfonyl)-1,1'-biphenyl-4-yl]pyrrolidin-2-one with 6-chloro-2-naphthylsulfonyl chloride in the presence of pyridine in DCM gave II. The latter inhibited human factor Xa in an in vitro fluorogenic assay with Ki <10 nM. Thus, I and compns. comprising I are useful as medicines for the amelioration of clin. conditions for which a Factor Xa inhibitor is indicated (no data).

IT 553651-65-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(factor Xa inhibitor; preparation of (sulfonylamino)pyrrolidinone factor Xa inhibitors starting from homoserines)

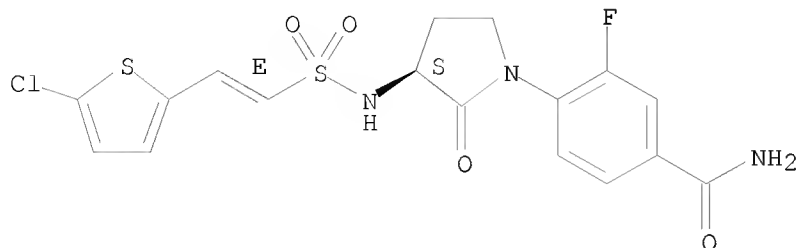
RN 553651-65-3 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-

10561259

2-oxo-1-pyrrolidinyl]-3-fluoro- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



IT 553651-62-0P 553651-66-4P 553651-67-5P,  
(S)-4-[3-[[[(6-Chlorobenzothien-2-yl)sulfonyl]amino]-2-oxopyrrolidin-1-yl]-  
3-fluoro-N,N-dimethylbenzamide 553651-68-6P 553651-69-7P  
, (S)-4-[3-[[[(6-Chlorobenzothien-2-yl)sulfonyl]amino]-2-oxopyrrolidin-1-  
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553651-93-7P

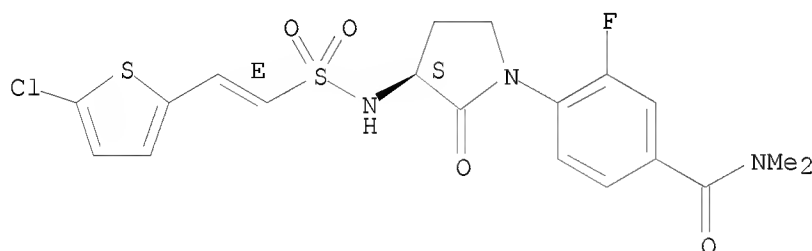
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)

(factor Xa inhibitor; preparation of (sulfonylamino)pyrrolidinone factor Xa  
inhibitors starting from homoserines)

RN 553651-62-0 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-  
2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

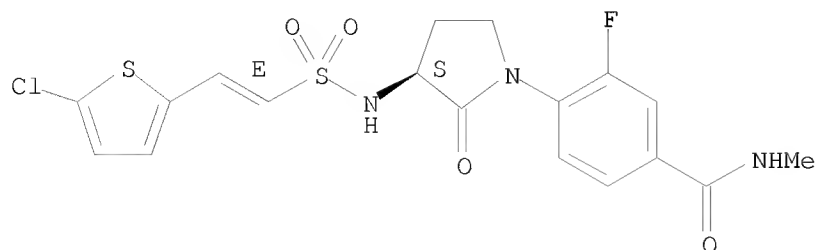


RN 553651-66-4 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-  
2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

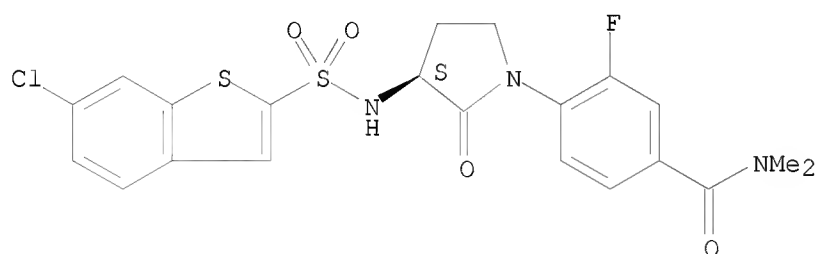
10561259



RN 553651-67-5 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

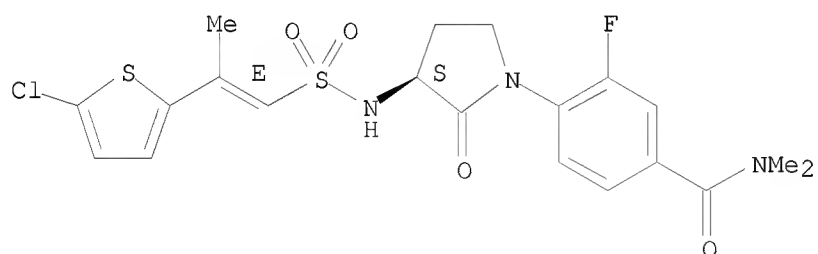


RN 553651-68-6 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(1E)-2-(5-chloro-2-thienyl)-1-propenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



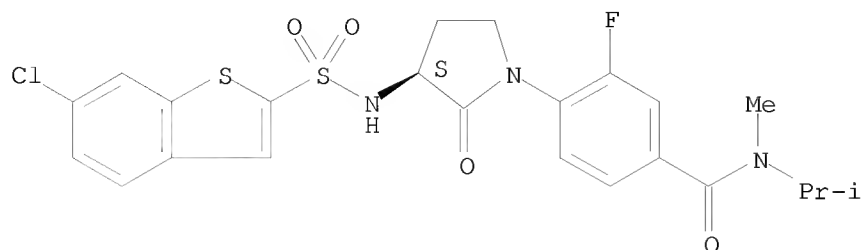
RN 553651-69-7 HCAPLUS

CN Benzamide, 4-[(3S)-3-[[[(6-chlorobenzo[b]thien-2-yl)sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N-methyl-N-(1-methylethyl)- (CA INDEX NAME)

Absolute stereochemistry.

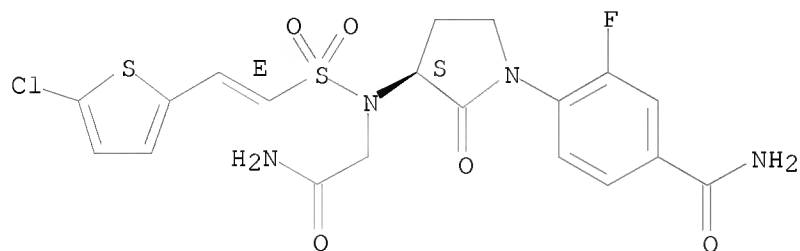


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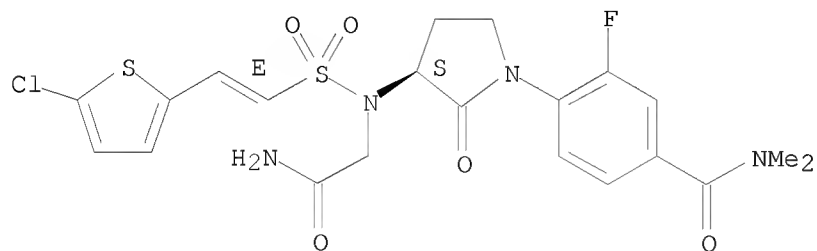
RN 553651-92-6 HCAPLUS  
CN Benzamide, 4-[(3S)-3-[(2-amino-2-oxoethyl)[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 553651-93-7 HCAPLUS  
CN Benzamide, 4-[(3S)-3-[(2-amino-2-oxoethyl)[[(1E)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl]amino]-2-oxo-1-pyrrolidinyl]-3-fluoro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

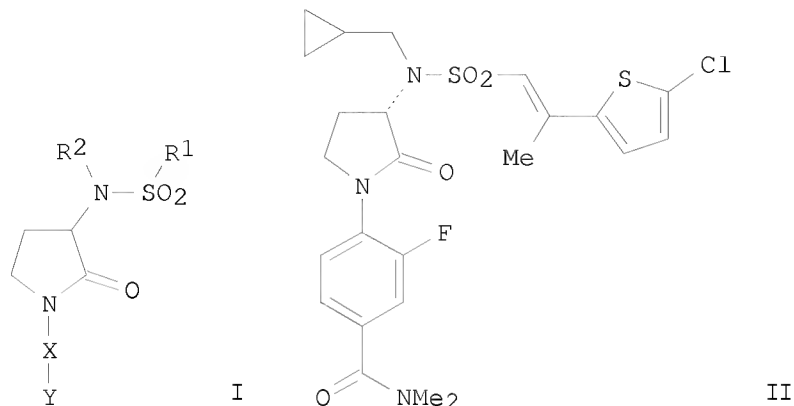
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L12 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

10561259

ACCESSION NUMBER: 2004:1124629 HCAPLUS  
DOCUMENT NUMBER: 142:74440  
TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-one  
derivatives as factor Xa inhibitors  
INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
Anderson; Kleanthous, Savvas; Mason, Andrew Mcmurtrie;  
Watson, Nigel Stephen  
PATENT ASSIGNEE(S): Glaxo Group Limited, UK  
SOURCE: PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110435	A1	20041223	WO 2004-EP6592	20040617
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1635817	A1	20060322	EP 2004-736979	20040617
EP 1635817	B1	20061122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2006527729	T	20061207	JP 2006-515988	20040617
AT 345795	T	20061215	AT 2004-736979	20040617
ES 2276307	T3	20070616	ES 2004-736979	20040617
US 20060148879	A1	20060706	US 2005-561545	20051219
US 7329685	B2	20080212		
PRIORITY APPLN. INFO.:			GB 2003-14299	A 20030619
			WO 2004-EP6592	W 20040617
OTHER SOURCE(S):	MARPAT 142:74440			
GI				



AB Title compds. represented by the formula I [wherein R1 = (un)substituted naphthyl, 2-benzofuryl, phenyl(alkyl), etc.; R2 = alkyl(cycloalkyl), alkylamino, alkoxyalkyl, etc.; with the proviso that R2 does not present alkylmorpholino; X = (un)substituted Ph or aromatic heterocyclic group; Y = H, halo, alkyl, amino, etc.; and pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of factor Xa. For example, II was given in a multi-step synthesis starting from the reaction of 2-fluoro-4-iodoaniline with tert-Bu ((3S)-2-oxotetrahydro-3-furanyl)carbamate. The prepared compds. showed activity in vitro assay for inhibition of factor Xa with Ki values less than 0.1  $\mu$ M, and in measurement of prothrombin time (PT) of human plasma. Thus, I and their pharmaceutical compns. are useful medicine, particularly in the amelioration of a clin. condition for which a factor Xa inhibitor is indicated (no data).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124628 HCAPLUS

DOCUMENT NUMBER: 142:74439

TITLE: Preparation of 3-(sulfonylamino)pyrrolidine-2-one derivatives as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Kleanthous, Savvas; Senger, Stefan; Smith, Ian Edward David

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110434	A1	20041223	WO 2004-EP6591	20040617
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

EP 1633347 A1 20060315 EP 2004-740039 20040617  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
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JP 2006527728 T 20061207 JP 2006-515987 20040617

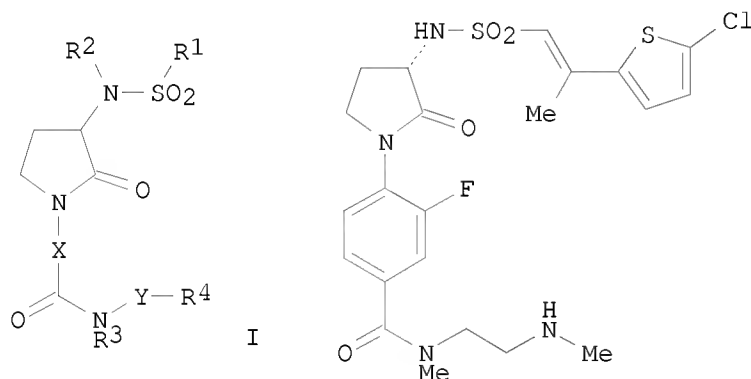
US 20070203206 A1 20070830 US 2006-561259 20060428

PRIORITY APPLN. INFO.: GB 2003-14370 A 20030619

WO 2004-EP6591 W 20040617

OTHER SOURCE(S): MARPAT 142:74439

GI



II

AB Title compds. represented by the formula I [wherein R1 = (un)substituted naphthyl, 2-benzofuryl, thienylalkyl, phenyl(alkyl), etc.; R2 = H, alkyl, alkylamido, carbonylalkoxy, etc.; X = (un)substituted Ph or aromatic heterocyclic group; Y = absent or alkylene; and pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of factor Xa. For example, II was given in a multi-step synthesis starting from the reaction of 2-fluoro-4-iodoaniline with tert-Bu ((3S)-2-oxotetrahydro-3-furanyl)carbamate. Most of the prepared compds. showed activity in vitro assay for inhibition of factor Xa with Ki values of less than 1  $\mu$ M. Thus, I and their pharmaceutical compns. are useful medicine, particularly in the amelioration of a clin. condition for which a factor Xa inhibitor is indicated (no data).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:511293 HCAPLUS

DOCUMENT NUMBER: 139:85238

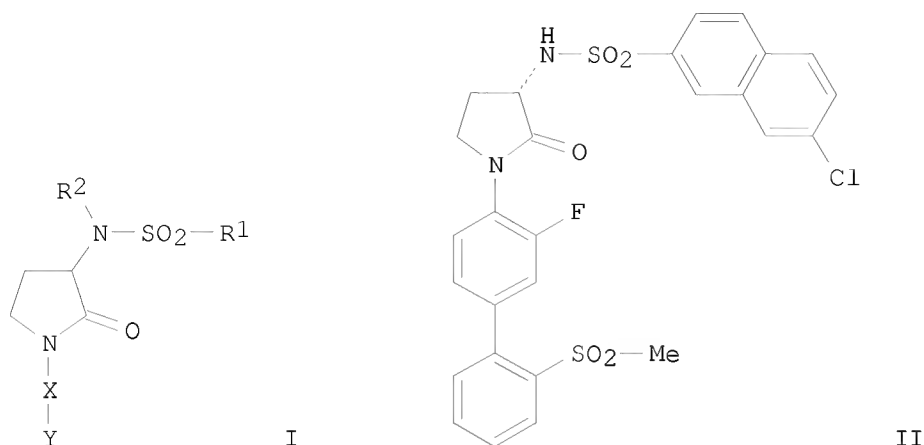
TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-ones as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
 Anderson; King, Nigel Paul; Kleanthous, Savvas; Mason,  
 Andrew McMurtrie; Pinto, Ivan Leo; Pollard, Derek

PATENT ASSIGNEE(S): Roland; Senger, Stefan; Shah, Gita Punjabhai; Watson,  
 SOURCE: Nigel Stephen; Young, Robert John  
 Glaxo Group Limited, UK  
 PCT Int. Appl., 112 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003053925	A1	20030703	WO 2002-EP14826	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
TW 262075	B	20060921	TW 2002-91136597	20021219
CA 2471461	A1	20030703	CA 2002-2471461	20021220
AU 2002366747	A1	20030709	AU 2002-366747	20021220
EP 1456172	A1	20040915	EP 2002-805350	20021220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002015200	A	20041013	BR 2002-15200	20021220
CN 1620434	A	20050525	CN 2002-828224	20021220
JP 2005519885	T	20050707	JP 2003-554642	20021220
HU 2005000137	A2	20060228	HU 2005-137	20021220
NZ 533129	A	20061222	NZ 2002-533129	20021220
RU 2318807	C2	20080310	RU 2004-122427	20021220
ZA 2004004147	A	20050621	ZA 2004-4147	20040527
IN 2004DN01467	A	20070209	IN 2004-DN1467	20040528
MX 2004PA06139	A	20041101	MX 2004-PA6139	20040621
NO 2004002990	A	20040920	NO 2004-2990	20040713
US 20050059726	A1	20050317	US 2004-499529	20041101
PRIORITY APPLN. INFO.:			GB 2001-30705	A 20011221
			WO 2002-EP14826	W 20021220

OTHER SOURCE(S): MARPAT 139:85238  
 GI



AB Title compds. I [wherein R1 = (un)substituted naphthyl, benzothienyl, benzofuryl, indolyl, phenyl(alkyl), 2,2'-bithiophen-5-yl, thienyl(alkyl), or thieno[3,2-b]thiophenyl; R2 = H, (CH2)*n*CONRaRb, (CH2)*n*CO2Rc, morpholinoalkyl, CO2Rc, or carboxyalkyl; X = H, halo, CN, alkyl, alkenyl, CF3, NRaRb, NO2, NRcCHO, NHCORc, NHSO2Rc, alkoxyalkyl, hydroxyalkyl, CORc, CONRaRb, SO0-2Rc, SO2NRaRb, or (un)substituted Ph, heterocyclyl, or heteroaryl; *n* = 1-3; Ra and Rb = independently H or alkyl; or NRaRb = (un)substituted heterocyclyl; Rc = alkyl; and pharmaceutically acceptable derivs. thereof] were prepared as factor Xa inhibitors. For example, coupling of (3*S*)-3-amino-1-[3-fluoro-2'-(methylsulfonyl)-1,1'-biphenyl-4-yl]pyrrolidin-2-one with 6-chloro-2-naphthylsulfonyl chloride in the presence of pyridine in DCM gave II. The latter inhibited human factor Xa in an in vitro fluorogenic assay with *K*<sub>i</sub> <10 nM. Thus, I and compns. comprising I are useful as medicines for the amelioration of clin. conditions for which a Factor Xa inhibitor is indicated (no data).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 113 ibib abs tot

L13 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124629 HCAPLUS

DOCUMENT NUMBER: 142:74440

TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-one derivatives as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
Anderson; Kleanthous, Savvas; Mason, Andrew Mcmurtrie;  
Watson, Nigel Stephen

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

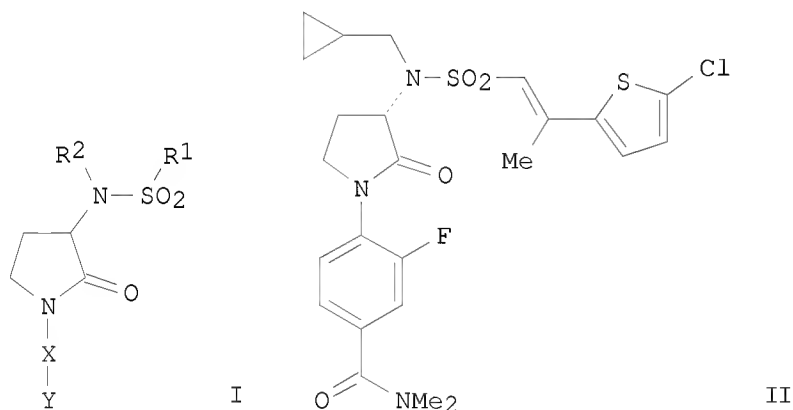
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND	DATE	APPLICATION NO.				DATE
WO 2004110435				A1	20041223	WO 2004-EP6592				20040617
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG										
EP 1635817				A1	20060322	EP 2004-736979				20040617
EP 1635817				B1	20061122					
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR										
JP 2006527729				T	20061207	JP 2006-515988				20040617
AT 345795				T	20061215	AT 2004-736979				20040617
ES 2276307				T3	20070616	ES 2004-736979				20040617
US 20060148879				A1	20060706	US 2005-561545				20051219
US 7329685				B2	20080212					
PRIORITY APPLN. INFO.:						GB 2003-14299				A 20030619
						WO 2004-EP6592				W 20040617
OTHER SOURCE(S):				MARPAT 142:74440						
GI										



AB Title compds. represented by the formula I [wherein R1 = (un)substituted naphthyl, 2-benzofuryl, phenyl(alkyl), etc.; R2 = alkyl(cycloalkyl), alkylamino, alkoxyalkyl, etc.; with the proviso that R2 does not present alkylmorpholino; X = (un)substituted Ph or aromatic heterocyclic group; Y = H, halo, alkyl, amino, etc.; and pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of factor Xa. For example, II was given in a multi-step synthesis starting from the reaction of 2-fluoro-4-iodoaniline with tert-Bu ((3S)-2-oxotetrahydro-3-furanyl)carbamate. The prepared compds. showed activity in vitro assay for inhibition of factor Xa with Ki values less than 0.1  $\mu$ M, and in measurement of prothrombin time (PT) of human plasma. Thus, I and their

pharmaceutical comps. are useful medicine, particularly in the  
amelioration of a clin. condition for which a factor Xa inhibitor is  
indicated (no data).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124628 HCAPLUS

DOCUMENT NUMBER: 142:74439

TITLE: Preparation of 3-(sulfonylamino)pyrrolidine-2-one  
derivatives as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Kleanthous, Savvas; Senger,  
Stefan; Smith, Ian Edward David

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

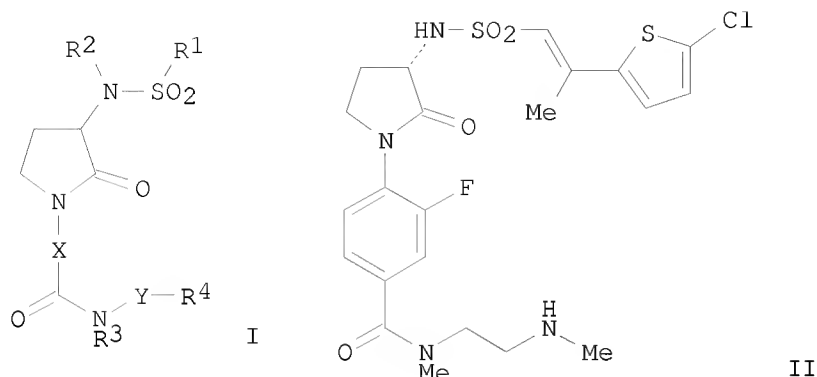
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110434	A1	20041223	WO 2004-EP6591	20040617
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1633347	A1	20060315	EP 2004-740039	20040617
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR			
JP 2006527728	T	20061207	JP 2006-515987	20040617
US 20070203206	A1	20070830	US 2006-561259	20060428
PRIORITY APPLN. INFO.:			GB 2003-14370	A 20030619
			WO 2004-EP6591	W 20040617

OTHER SOURCE(S): MARPAT 142:74439

GI





AB Title compds. represented by the formula I [wherein R1 = (un)substituted naphthyl, 2-benzofuryl, thienylalkyl, phenyl(alkyl), etc.; R2 = H, alkyl, alkylamido, carbonylalkoxy, etc.; X = (un)substituted Ph or aromatic heterocyclic group; Y = absent or alkylene; and pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of factor Xa. For example, II was given in a multi-step synthesis starting from the reaction of 2-fluoro-4-iodoaniline with tert-Bu ((3S)-2-oxotetrahydro-3-furanyl)carbamate. Most of the prepared compds. showed activity in vitro assay for inhibition of factor Xa with Ki values of less than 1  $\mu$ M. Thus, I and their pharmaceutical compns. are useful medicine, particularly in the amelioration of a clin. condition for which a factor Xa inhibitor is indicated (no data).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:511293 HCAPLUS

DOCUMENT NUMBER: 139:85238

TITLE: Preparation of 3-(sulfonylamino)pyrrolidin-2-ones as factor Xa inhibitors

INVENTOR(S): Borthwick, Alan David; Chan, Chuen; Kelly, Henry  
Anderson; King, Nigel Paul; Kleanthous, Savvas; Mason, Andrew McMurtrie; Pinto, Ivan Leo; Pollard, Derek  
Roland; Senger, Stefan; Shah, Gita Punjabhai; Watson, Nigel Stephen; Young, Robert John

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

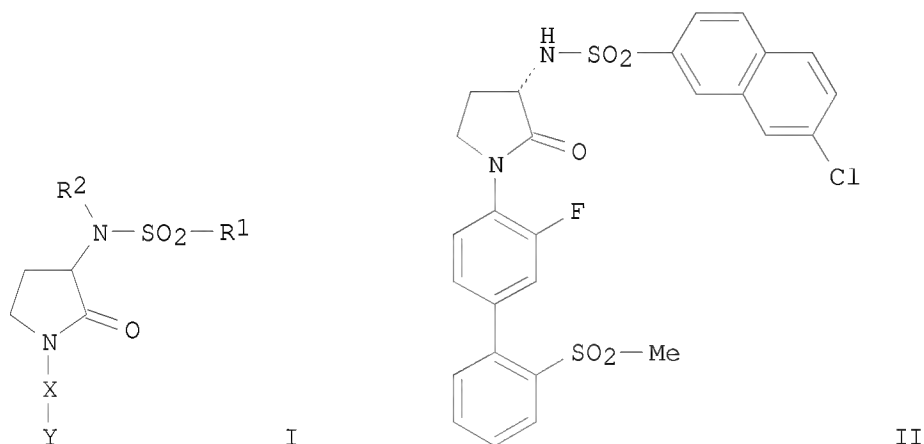
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003053925	A1	20030703	WO 2002-EP14826	20021220
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PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

TW 262075	B	20060921	TW 2002-91136597	20021219
CA 2471461	A1	20030703	CA 2002-2471461	20021220
AU 2002366747	A1	20030709	AU 2002-366747	20021220
EP 1456172	A1	20040915	EP 2002-805350	20021220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002015200	A	20041013	BR 2002-15200	20021220
CN 1620434	A	20050525	CN 2002-828224	20021220
JP 2005519885	T	20050707	JP 2003-554642	20021220
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RU 2318807	C2	20080310	RU 2004-122427	20021220
ZA 2004004147	A	20050621	ZA 2004-4147	20040527
IN 2004DN01467	A	20070209	IN 2004-DN1467	20040528
MX 2004PA06139	A	20041101	MX 2004-PA6139	20040621
NO 2004002990	A	20040920	NO 2004-2990	20040713
US 20050059726	A1	20050317	US 2004-499529	20041101
PRIORITY APPLN. INFO.:			GB 2001-30705	A 20011221
OTHER SOURCE(S):			WO 2002-EP14826	W 20021220
GI				
MARPAT 139:85238				



AB Title compds. I [wherein R<sup>1</sup> = (un)substituted naphthyl, benzothienyl, benzofuryl, indolyl, phenyl(alkyl), 2,2'-bithiophen-5-yl, thienyl(alkyl), or thieno[3,2-b]thiophenyl; R<sup>2</sup> = H, (CH<sub>2</sub>)<sub>n</sub>CONRaRb, (CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>Rc, morpholinoalkyl, CO<sub>2</sub>Rc, or carboxyalkyl; X = H, halo, CN, alkyl, alkenyl, CF<sub>3</sub>, NRaRb, NO<sub>2</sub>, NRcCHO, NHCORc, NHSO<sub>2</sub>Rc, alkoxyalkyl, hydroxyalkyl, CORc, CONRaRb, SO<sub>0</sub>-2Rc, SO<sub>2</sub>NRaRb, or (un)substituted Ph, heterocyclyl, or heteroaryl; n = 1-3; Ra and Rb = independently H or alkyl; or NRaRb =

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(un)substituted heterocyclyl; R<sub>c</sub> = alkyl; and pharmaceutically acceptable derivs. thereof] were prepared as factor Xa inhibitors. For example, coupling of (3S)-3-amino-1-[3-fluoro-2'-(methylsulfonyl)-1,1'-biphenyl-4-yl]pyrrolidin-2-one with 6-chloro-2-naphthylsulfonyl chloride in the presence of pyridine in DCM gave II. The latter inhibited human factor Xa in an in vitro fluorogenic assay with K<sub>i</sub> <10 nM. Thus, I and compns. comprising I are useful as medicines for the amelioration of clin. conditions for which a Factor Xa inhibitor is indicated (no data).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

55.40

602.37

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-8.00

-8.00

STN INTERNATIONAL LOGOFF AT 10:14:39 ON 31 MAR 2008